



U.S. Fish & Wildlife Service

# Arctic National Wildlife Refuge

Revised Comprehensive  
Conservation Plan

Final Environmental Impact Statement

Volume 2 - Appendices



## **U.S. Fish and Wildlife Service Mission**

The mission of the U.S. Fish and Wildlife Service is working with others to conserve, protect, and enhance fish, wildlife, plants, and their habitats, for the continuing benefit of the American people.



## **National Wildlife Refuge System Mission**

The mission of the National Wildlife Refuge System is to administer a national network of lands and waters for the conservation, management, and, where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.

This Comprehensive Conservation Plan describes programs that may exceed future budget allocations and therefore does not constitute specific commitments for future staff increases, project details, or funding.



**U.S. Fish & Wildlife Service**

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**Revised Comprehensive  
Conservation Plan**

**Final Environmental Impact Statement**

**Volume 2 - Appendices  
January 2015**

**Prepared by Arctic Refuge and the Alaska Region of the U.S. Fish and Wildlife Service  
in cooperation with the National Aeronautics and Space Administration**

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## Acronyms

<b>ADEC</b>	Alaska Department of Environmental Conservation
<b>ADFG</b>	Alaska Department of Fish and Game
<b>ADNR</b>	Alaska Department of Natural Resources
<b>AIWFMP</b>	Alaska Interagency Wildland Fire Management Plan
<b>ANILCA</b>	Alaska National Interest Lands Conservation Act
<b>ANCSA</b>	Alaska Native Claims Settlement Act
<b>ASRC</b>	Arctic Slope Regional Corporation
<b>BIA</b>	Bureau of Indian Affairs
<b>BLM</b>	Bureau of Land Management
<b>BLM-AFS</b>	Bureau of Land Management Alaska Fire Service
<b>CEQ</b>	Council on Environmental Quality
<b>CFR</b>	Code of Federal Regulations
<b>CRMP</b>	Comprehensive River Management Plan
<b>DOI</b>	Department of the Interior
<b>EA</b>	environmental assessment
<b>EIN</b>	easement identification number
<b>EIS</b>	environmental impact statement
<b>EPA</b>	Environmental Protection Agency
<b>FAA</b>	Federal Aviation Administration
<b>FMP</b>	Fire Management Plan
<b>FNSB</b>	Fairbanks North Star Borough
<b>GIS</b>	Geographic Information System
<b>GMU</b>	Game Management Unit

## Acronyms

<b>GPS</b>	Global Positioning System
<b>I&amp;M</b>	Inventory and Monitoring
<b>ICRMP</b>	Integrated Cultural Resource Management Plan
<b>IWSRCC</b>	Interagency Wild and Scenic Rivers Coordinating Council
<b>KIC</b>	Kaktovik Iñupiat Corporation
<b>LCC</b>	Landscape Conservation Cooperative
<b>LPP</b>	Land Protection Plan
<b>MPA</b>	Marine Protected Area
<b>MRA</b>	Minimum Requirement Analysis
<b>NASA</b>	National Aeronautics and Space Administration
<b>NEPA</b>	National Environmental Policy Act
<b>NOAA</b>	National Oceanic and Atmospheric Administration
<b>NPR-A</b>	National Petroleum Reserve-Alaska
<b>NPS</b>	National Park Service
<b>NWPS</b>	National Wilderness Preservation System
<b>NWSRS</b>	National Wild and Scenic Rivers System
<b>ORV</b>	outstandingly remarkable value
<b>PLO</b>	Public Land Order
<b>PUNA</b>	Public Use Natural Area
<b>RIT</b>	Refuge Information Technician
<b>RNA</b>	Research Natural Area
<b>ROC</b>	region of comparison
<b>ROD</b>	record of decision
<b>SNAP</b>	Scenarios Network for Alaska Planning
<b>TUS</b>	transportation or utility systems

<b>USFS</b>	U.S. Forest Service
<b>USGS</b>	U.S. Geological Survey
<b>VUMP</b>	Visitor Use Management Plan
<b>WSA</b>	Wilderness Study Area
<b>WSP</b>	Wilderness Stewardship Plan

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## **A Note about Wilderness Terminology**

Throughout this Plan, the term “wilderness” has different meanings depending on the context in which it is used. To clarify the intent of these different meanings, the following conventions are used:

### ***“w”ilderness versus “W”ilderness***

Arctic Refuge is currently comprised entirely of wildlands that host natural, undeveloped conditions, a range of special values, and provide opportunities for isolated and primitive recreation. Refuge staff works to protect these qualities and special values throughout the Refuge. The word “wilderness” (“w” not capitalized) and the phrase “wilderness characteristics” are used when describing these qualities and special values across Arctic Refuge as a whole. The word “wilderness” (not capitalized) is also used as an adjective when describing the wilderness qualities referenced in the Alaska National Interest Lands Conservation Act (ANILCA) Section 101(b) (“wilderness resource values”) and Section 304(g) (“wilderness value”).

The word “Wilderness” (“W” capitalized) is used when it refers specifically to Refuge lands designated by Congress as part of the National Wilderness Preservation System. “Wilderness character” is a phrase from the Wilderness Act used to summarize the qualities the agency is mandated to preserve within designated Wilderness. These include the maintenance of “untrammeled,” “natural,” and “undeveloped” conditions and the provision for “solitude or primitive and unconfined recreation.” Note that these qualities are essentially the same as the wilderness characteristics found across all the wildlands of Arctic Refuge, including the approximately 60 percent of the Refuge currently under Minimal Management (see Chapter 2, Section 2.3.3). However, by statute, the Wilderness Act requires the Refuge provide a very high level of protection to these qualities of Wilderness character within designated Wilderness.

### ***For More Information***

“Wilderness” and related terms, such as “wilderness characteristics,” “Wilderness character,” and “wilderness values” are defined in Appendix M. For an explanation of the differences between Minimal Management and the management of designated Wilderness, see Chapter 2 (Sections 2.3.3 and 2.3.4) and Chapter 3 (Table 3-3).

## A Note about Wilderness Terminology

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## A Note about Acreages

Various acreages are reported throughout this Comprehensive Conservation Plan (Plan, Revised Plan for Arctic National Wildlife Refuge (Arctic Refuge, Refuge). These acreages come from many sources, including:

- Official land surveys
- Warranty deeds, patents, and other legal documents
- Public Laws, Public Land Orders (PLOs), Executive orders, etc.
- Geographic Information Systems (GIS) data

All acreages reported in this document are estimates of the true area represented on the ground. Some of these estimates are inherently more accurate, or closer to ground conditions, than are others. For example, surveys performed by a licensed land surveyor provide the most accurate acreage estimates. Acreages obtained from GIS data are typically less accurate. Acreages obtained from Public Laws, PLOs, and other legislation may or may not be derived from land surveys, making it difficult to ascertain the accuracy of these estimates. Because of the range of sources from which acreages are obtained, the following guidelines have been used to report acreages in this Plan.

- When reporting acreages that are based on surveys, patents, deeds, and interim conveyances, the reported acreage is that which is specified by the survey or legal document. These acreages will be reported to two decimal places.
- We handle acreages from laws, regulations, and other legal documents in two ways. If we are citing what the document said, we report the acreage as it is specified in the legal document, whether or not the acreage values are derived from actual surveys. We also use GIS to map acreages from laws, regulations, etc., and GIS-derived acreages may not agree with those in the legal document.
- When reporting acreages derived solely from GIS data, the acreages are rounded to take into account the approximation of digitally-constructed parcel boundaries. The magnitude of rounding is determined by the following:

ROUNDING FACTORS		EXAMPLES	
Acreage Range	Round Up to Nearest	GIS-derived Acreage	Rounded Up To
0 - 99	1	27.1857	28
100 - 999	10	133.5374	140
1,000 - 9,999	100	4,729.3048	4,800
10,000 - 99,999	1,000	87,637.1057	88,000
100,000 – and higher	10,000	684,304.5108	690,000

## A Note about Acreages

- Very large acreages (in the millions) will be displayed in the text as a number with two decimal places (e.g., “19.64 million acres”). These acreages are still rounded per the tables here and should not be assumed to be highly accurate acreages such as from surveys or legal documents.

Based on these noted accuracy issues and guidelines, there may be cases in this Plan where the summation of individual acreages may not coincide with anticipated total acreages. This is to be expected given the inherent accuracy limits of the various acreage estimates.

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